

Impact of Green Supply Chain Management Practices on Environment Performance and Competitive Advantage

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Abstract

Supply chain contains all roles which is involved through directly or indirectly to fulfil the customer demand. The important factors involved in supply chain are customer, manufacturer, purchasing, wholesaler, transportation and retailers. Supply chain management take the responsibility of designing, planning, executing, controlling and monitoring of supply chain activity with the purpose of building competitive infrastructure, leveraging global logistics and much more. Green supply chain management introduce the sustainability in development of every field of production and operational management. So that, the present supply chain management aims to find out the combination among environmental performance, green suppliers, competitive advantages and green innovation in the field of industries as we know industrial sector is very important for all developing countries. So after finding and analyzing the GSCM practices, these are being applied in manufacturing of poles. Our result shows that there is positive relation between environmental performance and competitive advantages with the use of green supply chain management practices i.e. Green supplier, green innovation and green manufacturing. It shows an important positive relationship among green innovation with environmental performance and environmental performance with competitive advantage.

Keywords: supply chain management; logistics; environmental performance; competitive advantage

Introduction

While the idea of supply chain management is certainly outdated on trade itself, the term only dates back to 1982, when Keith Oliver, a British logistics and consultancy expert, used to use it when he was conducted by the Financial Times. Single dealing with the flow of goods and raw materials transformation to final consumer, also include the information flow. After sometime with the collaboration of supply chain activities through improved of competitive edge and relationship. The supply chain management discipline (SCM) that the manager processes and supplies through all the steps of the task, work, or product it provides.

Material use in business has journey which move from one point to point next phase at least it's ready to the deliverable to the final consumer (Kildienė et al., 2014). For the getting various stages efficiently require controlling for that where the supply chain management are come in. All way of business be able to made the most of the involved resources and be as creative possible. Suppliers require management or people are managed. They essential be accounted for and carried through from start point to finish with careful control, whether that supplier are goods or services. Supply chain management is using to explained a lot of many lines which is use to connect the movement of finance, information and material performance. These matters normally outsourced from anyone number of place to other. In cause's supplier, manufacturers, distributors and retailer wholesalers included. Pieces can process by several hands until when they reach to the consumer.

Supply chain management is task with organization or collaboration this are front or back, outside and within firm. Supply Chain Management is main objective is improving the services for the customer with the minimum expense of the firm, which is looking for at the same time to reduce its supply chain costs. First of all, comes the plan and policy, but many more stops along this route, on the other hand which when implemented must be watch as would any other mission to amount its efficiency and control any problem that rise before they become issue that effect to the cost of the process. Supply chain management did not display up completely shaped but was effect by other rules. It is the complete up of the pieces or bits of systems engineering, industrial engineering, operations management, procurement, information technology and marketing, logistics management. The field is anything but static, with developments continuing to this day, including taking into consideration issues of sustainability, as well as other ethical concerns, and incorporating risk management. As markets globalize, supply chain management grows in complexity and reach.

The field is no matter which but static, with continuing development to this day, which including problems of consideration like ethical concerns as well as other sustainability issue, and also include of incorporating risk management. As globalize markets, supply chain management reach with grows in complexity. As expected, having to control and integrate all these very different parts is what makes supply chain management a challenge. However difficult that goal might be to achieve, the rewards in customer satisfaction and bottom-line savings are more than enough motivation to seek a cohesive whole, making the journey from raw materials to final goods efficient for the organization and satisfying for the customer. As estimated, having to integrate and control of all of these but the actual different parts is that what makes supply chain management is task. But it's hard to achieve the might goal (Shukla et al., 2011), the rewards in consumer satisfaction and bottom line saving are more than enough motivation to seek an organized whole, for satisfying the customer making the way of raw

materials to final goods effective for the organization. The task in any Supply Chain Management practice is supplying of raw materials and delivering of final goods or services, and coordinate all the varied parts into a full adhesive. The goal is to minimize costs in getting that purpose. The problem is that there are often several conflicts among supply chain partner. For example, warehouse space is limited and sales department might want more inventory on hand, but and cannot fulfil this need. Companies must implement all the green practices to achieve the competitive advantage. It spread awareness of GSCM because in most of the cases companies ignore the few major steps in green production.

Literature Review

Survey of Green Supply Chain Management

With increasing worries about natural pollution in the wake of industrialization in many natural assets has misuse and one of the most common issue in supply chain is ecological problem. (Shukla et al. 2011). The green store network knowledge of the executives was considered in 1990 according to (Ghobakhloo et al., 2013; Shukla et al., 2011; Seman et al., 2012a). According to Brandenburg et al., (2014), now a day with supportable advancement, in supply chain management social and natural issue one of the fundamental problem of the analysts. The review of the inquiries uncovers that the first exertion within the execution of the GSCM happened in 1994, and began with the green buy idea. Well later, due to the expanding significance of ecological issues, the necessity aroused evident to execute green strategies and benchmarks in the least phases of the assembly network (Hajikhani et al., 2012).

Green supply chains are often characterized because the ideas of mainstreaming natural surveys in item plan, choice and sourcing of crude materials, generation, last item conveyance to the client and therefore the administration of after-deal impacts within the store network (Seman et al., 2012b; Kildienė et al., 2014). The definitions being given within the standard investigations of the green store network must be utilized associated with ideas, for instance , eco-structure (Sarkis et al., 2011), rotate coordination's and green buy (Hajikhani et al., 2012) green arrangement, naturally benevolent items and administrations (Hajikhani et al., 2012; Chiou et al., 2011), and green development (Hottenrott et al., 2012; Schiederig et al., 2012; Chiou et al., 2011; Lampikoski, 2012), supply chain the board rehearses on manageability (Martínez-Jurado & Moyano-Fuentes 2014), worldwide supply chain organize (Hasani et al., 2015; Boukherroub et al., 2015). Moreover, obvious improvements are acquainted with the green supply chain management the executives model, incorporating competitive benefiting smaller scale, full scale conditions, counting customer necessities, made customer progress and fulfilment. The green supply chain the board model is exhibited in Figure I.



Fig. 1. Green supply chain management model

Practices of Green in Supply Chain Management

Green supply chain is essential for improvement in operations, productivity and all the other activities which are take places in the supply chain. The practices which adopted in green supply chain some of them are given below.

The researcher, Hamner (2006), concluded that a coordinated effort to advance within the supply chain is activated by the level of involvement of suppliers and customers, so organizations can help the two parties effectively activate natural governance frameworks within the supply chain to expand service providers' performance. Reliable with the sooner cases, it tends to expressed that this future competitive benefit relies upon an honest relationship with providers. To avoid harm to the availability chain routs, associations must guarantee that their providers act as per foreordained social and ecological criteria all at once to forestall maltreatment in supply forms. Associations trying to vary what's more, improve their competitive benefit must assume about nearer with providers and further enhance the association with benefactor with the skills and knowledge (Chiou et al., 2011). Min and Kim (2012) recognized their natural elements affecting to choice on the determination of the providers & examined effect of the ecological variables being considered in buy choices. They stressed the recognized factors and proposed intermittent assessment of the suppliers in the store link. Likewise, Large and Thomsen (2011) led an examination in Germany & presented 5 issues in the exhibition assessment of green store network & evaluation of green providers in production network. The effect of commitments coming about because of the advancement was explored by Min and Kim (2012).

They inferred that pressure placed on the providers to create green items came about in a competitive benefit by cost decrease and well natural execution for supply chain. As indicated by specialists, provider's responsibility to development is one of the main significant issues in the fruitful execution of green store network the executives. Additionally, a provider's pledge to green acquirement will straightforwardly influence their pledge to give the fundamental things & ecological wants into thought. In a review, which was directed by Chiou et al., (2011) link between green success & green development was confirmed. In further examines of conclusion that development of green by supplier & implement of natural an organization was

too affirmed. In an on-going report, Rostamzadeh et al., (2015) showed workstation creator in Asia, which plans to survey green store network the executives (GSCM) markers for its specialists & providers. By a careful writes audit, they affirmed the importance of green development as far as eco-plan all through the whole supply chain (Do, Nguyen, Nguyen, Le, & Trinh, 2020).

Purchasing materials which have such non-use of dangerous/hazardous chemicals and enviable eco-friendly characteristics as reusability, recyclability which is Green supplies sourcing. With many time concerns on environmental safety, professional's procurement has been encouraging to revisit the existing source and what effect can be take place by their purchasing strategy. Economic friendly buying is so much beneficial for the reproduction, and also green supply chain focus on reduce the wastage and on all those activities which can be used for the remanufacturing in the supply chain. Some of the researchers did search how the green supply chain can improve the firm's compatibility & their financial efficiency. Due to this better implementation of green buying strategy, environmental performance, cost reduction of product can be improved and can achieve positive effect of the firm in the market. Green buying is further divided into five factors which are operational management, supply chain management, ecological, authentication of environment & external environment of firm, all these factors improve the performance of the firm of green buying. With the acceptance of green buying in supply chain business operations is a dependable instrument in the safe of wastage, water pollution & air (Le, 2020).

Actions focused on corporate and consumers green marketing and other marketing activities i.e. product, price, place, promotions, planning, production, and after sale service, these all designed for the achievement of organizational goals and reduce the effects which are harmful for the products. Green marketing encourages the products which are friendly for the environment. These products satisfy the needs and want of customers and does not effect at the beauty of the environment. By the green marketing corporate can increase their financial and competitiveness powers which has optimistic effect in the society.

Practices of Green Management

Practices of Green management (PGM)) offer a firm with extra sources of info that can improve environment objectives. The green organization practices help the firm for improved the picture environment obedience improvement, saves of cost, achieve that level which is suitable for the society, increase efficiency, with acceptance the practices of green management which provide help to improve the image of the firm.

Warehousing and Green distribution plays a vital role in the elimination of wastage & warehousing also useful for the performance of the firm with value addition. To gain super performance of environment all of is possible with the help of green distribution enterprises. The adoption of green manufacturing practices is considered socially and environment responsible to lessen the bad effects of corporate production and increase its profit. Green production practices improve process efficiency. By the green manufacturing firms can decrease the cost of their products & improve the quality of product and improve the efficiency of the production process. By adopting these practices firms can achieve competitive advantage in the society.

With the green innovation importance in all sciences comes from the fact: Environmental

issues are increasing all over the world. The definitions provided for innovation focused on the positive impact on decline. You can see environmental pollution in basic research in this field. One of the oldest green innovation definitions presented here ferries, as “the creation of new products and processes that has an added value for the Customer and the dealer, but its main purpose is to reduce negative environmental impacts”. According to the Schiederig et al., (2012) Innovation of green “the creation or use of products (goods and services), processes, marketing practices, new organizational structures and organizations – with or without intent leading to environmental improvements compared to prior trends”. Practically, many organizations try to recover in the market and stay competitive.

This cannot be achieved without taking into account global environmental issues Such as climate change and lack of natural resources Find new ways to do business with the help of innovative activities. Last but not least, In addition to the environmental, economic and social benefits, sustainable development and diffusion of green innovation Green innovation as a management tool. Green Innovation is clear that economic and social development is the only of the main factor of success and get a business success also competitive advantage for your company nation-wide. Also, green invention has a positive effect Competitive result. During the literature review, researchers study on green innovation assessment and development trend analysis in different dimensions (Schiederig et al., 2012; Conding et al., 2012). The study presented in this research model was used to grow.

Organization gets the opportunity with the practices of reverse logistics and green transportation, to reduce their cost and improve the image. Logistics can create more profitability, with saved of logistics overheads by enhancement of customer association and helping to transport system efficacy. The practice of reverse logistics connects with the practice of opposite logistics like first one re-using, second is re-cycling, and last re-manufacturing, and which can manufacture of the product for the used again for the customer. Last the green logistics plan provide the better environment with minimize the cost and standard quality.

Logistics management and global supply chain (GSC) operations are also mainly energy dependent as fossil fuels, which are the most common explanations for global climate change, heating, increased carbon, pollution, and greenhouse gas emissions. Renewable energy and bio fuels are required in supply chain processes, thus obtaining a sustainable environmental and economic process. Related logistics activities consume more energy to accomplish their mission. Renewable energy and bio fuels improve the economic performance of companies as well as reduce carbon emissions. In addition, fossil fuels are more expensive than bio fuels and green energy sources. Stringent government policies as well as customer awareness are increasing pressure on the corporate sector to use bio fuels and environmentally friendly energy" in their supply chain operations (Stekelorum, Gupta, & Kumar, 2021).

Bio energy can reduce carbon emissions and increase corporate profitability. Cost minimization is considered the most “important factor for companies in implementing green practices in supply chain operations. Implementation of Green Supply Chain initiatives will help reduce the cost of packaging, parts and materials using recycled, recycled and recycled products. Khan et al. pointed out that green practices make it possible to capture new markets and export to non-environmental countries, while polluted companies are unable to export their products to pro-environmental countries such as the US, Germany, UK and Poland. Undoubtedly, green supply chain management practices are a tool for companies to reduce the

price of their products, increase profitability and increase market share. On the other hand, to improve social performance, firms also adopt green practices in their business activities. Social performance indicates improvement of people's quality life standard without compromising on environmental beauty. In addition, social performance includes the enhancement of firm image and the improvement of sustainability, as well as reduction in environmental risks.

By adopting GSCM practices, firms may enhance their operational performance through improving products quality and improving delivery service. Green supply chain management initiatives also help organizations to improve their environmental performance such as reduction in carbon emissions, elimination of wastage in the supply chain and build strong relationship with their suppliers which can provide help in the remanufacturing process. Integrate the firm with the environmental management and production strategy will help out the firm to enhance the overall performance (Habib, Bao, Nabi, & Islam, 2021).

Supply Chain Management Advantages

Supply chain productivity enhances the profit with the lower cost. Companies perform good arrange request, transfer the good value of stock, trade in barriers, less cost, achieve consumer requirement with efficient manner in which management enable. Companies' main type of its supply chain management involved its vendors and the end consumers. It makes a chain through raw material vendors, producers, wholesalers, retailers and final consumers. A most complex in supply chain like involved a numbers of vendors and many consumers or end consumers and all the companies give the support required to beneficially get items to consumers as well as other party transportation provider, fiscal organization, supply chain ERPs and promotion analyst's giver.

In 1940 and 1950 era mechanization found by Pallet and pallet lifts which purpose to efficient inventory space and racking layout in warehouse. Through Pallet loading or unloading concept easier and use for pallet it becomes famous transportation management in 1950. It used in containers movement from trucks, trains and ships to move other. This phase of supply chain famous worldwide and it perform vital role in industrial engineering as well as warehousing system. In 1960s transportation diverted to trucks rather than railroad and warehousing, inventory management and transportation freight convert into Physical Distribution Management as per requirement. The National Council of Physical Distribution Management organization became the field leader and training and more research took place with wide industries. Firstly, created design which was joining map edge Production and Distribution Research centers used for Supply Chain and distribution plan as well as new control technology for automatic material handling. The main logistical trend in the 1980s was a position for being costly to get and complex to run, but it was key to the company's earnings. In 1985, the National Board of Physical Distribution said, Contrary to evolving principles that include integrating the flow of products, services, and information related to home and abroad. In 1980s an important of logistics movement its character for existing expensive buy and complex to run till categorical vital business margin. The National Council of Physical Distribution Management developed the Council of Logistics Management which had been mostly kept in military logistics.

In the recent past, it is very common to sea environment problems is increasing very rapidly and pollute the fabric of our society. Climate changes is taking place very rapidly therefore shortage of natural resources, water, damages of plant and different type of diseases

are taking place in the animals. But on the contrary, human beings also suffering from different types of diseases like lungs cancer, typhoid fever and corona virus etc. Green supply chain reduces the degradations in the society by controlling the wastage of water, carefully usage of natural resources. Green supply chain concept is to provide better sustainability due to which cost can be reduction and mitigation in environmental pollution and provide help in the economic growth in term of high value satisfaction and competitive advantage. Provide greater chances to enhance the export in other countries which does not have environment. In this way they can get positive image and reputation. The objectives of green supply chain are spread the awareness in the corporate sector they must recognize their social responsibility while designing new product innovation, by reduction in wastage and remanufacturing in the sustainable environment (Liu, Hu, Tong, & Zhu, 2020).

The word green supply chain or justifiable discusses the idea of integrating sustainable environmental processes into the traditional supply chain. This can include processes like supplier selection and buying material, product manufacturing, product design, and assembling, distribution and end-of-life management. Instead of mitigating harmful impact of business and provide chain operations, green supply chain involves value addition and/or value creation through the operations of whole chain. Undeniably, reducing air, water and waste pollution is that the main goal of green supply chain, while green operations also enhance firms' performance in terms of less waste manufacturing, reuse and recycling of products, reduction in manufacturing costs, greater efficiency of assets, positive image building, and greater customer satisfaction. In the planet awareness growing regarding the environmental, firms initial to face pressure by the government and customers & also by the stakeholders to reduce the effect which is harmful for the society. Corporate sector must be keep in mind those factors which are harmful for the society like smoke of the factories and wastage water mix with chemicals does great impact on the health of surroundings residence. Since the last couple of years global warming is increasing rapidly therefore it has been successful to grab the attention of the experts. Therefore, experts are giving their suggestions how we can control the global warming, wastage and air pollution issues. In the boundary of the operation management & Production one of essential topic is environmental issues in supply chain management.

In today's competitive market for maintainable growth which plan to simultaneously achieve the goal of business benefits and reduce environment risk a strategy green supply chain management is used. The concept of green supply chain management is most often used due the increase in govt. rule to protect the environment and on the other point the advancement on industrial productions in terms of manufacturing techniques. Environment problems in the supply chain are consider as important due to this research has been conducted but the result is not decisive in all contexts and industrial environment. The growths of maintainable supply chain are increase according to the recent years of study within industry as well, in organizations are struggle to the recover the industries activity and want to gain market competitive advantage by forcing such issues like depleting resources, reduction of pollution. Enhancements are required to develop innovative economic activities. So in manufacturing and service delivery consistent with environmental issues the Green innovation is considered as one of the most effective way. Anderson point out that green innovation must be revisited due to contextual needs. If the process is traced back to the phase of product or service development, then it may be adopting and consider it as friendliness. Because the green innovation is based

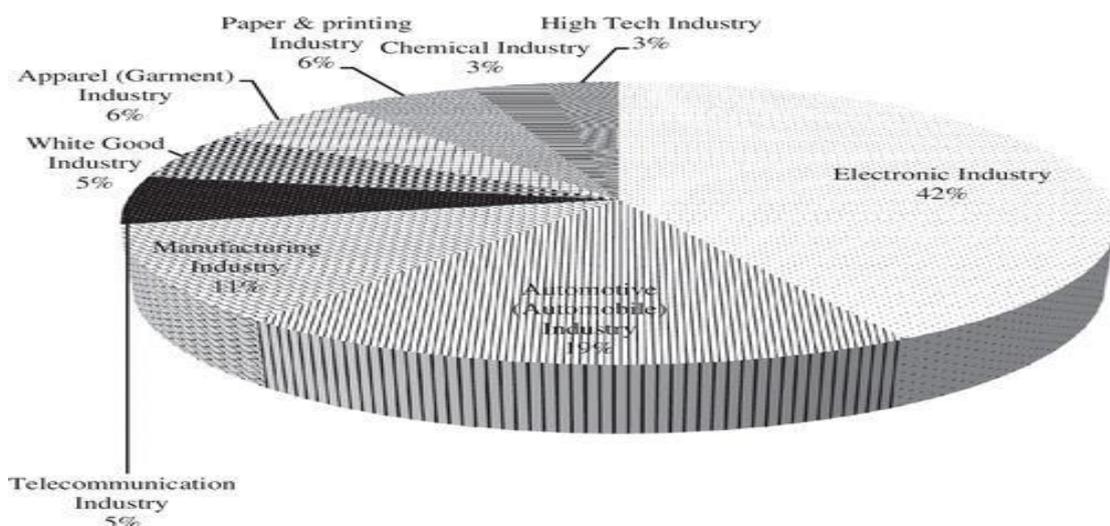
on product innovation system. Green innovation is viewed as three different dimensions: green innovation in a product or in a process or green innovation itself according to the study between the years 2006 to 2008. China introduces the concept of green innovation management to the research area. Improper management may show the result in an increase in cost. Actually the environmental performance of companies has always been out of the sight of researchers. Few questions are tried to solve in this research like whether directly or indirectly is there any kind of relationship among green suppliers, green innovations, performance of environment and company's competitive advantage.

Green Supplier Effect on Environmental Performance and Competitive Advantage

In green supply chain supplier participation is essential for the achieving the advantage such as cost saving and environmental innovation. Therefore, the supplier must assist the purchasing company to change the incoming logistics process to reduce waste (for example, packaging that can lead to operational benefits such as cost savings and ease of collection. Azevedo suggests that environment cooperation with supplier provide the same advantages as non-green supplier cooperation due to improve the level of combination. GSCM is associated with suppliers with operational performance by reducing production costs, fast and reliable delivery, and an improved response to unexpected events

Environmental Performance

Over the years, researchers have been studying environmental concepts in supply and management chains. Green suppliers have a positive impact on the environment. We area. Improper management may show the result in an increase in cost. Actually the environmental performance of companies has always been out of the sight of researchers. Few questions are tried to solve in this research like whether directly or indirectly is there any kind of relationship among green suppliers, green innovations, performance of environment and company's competitive advantage. Comprehensively compiled literature related to the “green



environmental resource selection” description” “vendor selection,” and from academic databases including Science Direct, Emerald, Springer-Link Journals, IEEE Xplore, Academic Search Premier, and World Scientific Net. After a methodological decision analysis of all collected articles, we reviewed 59 articles in an international magazine published in 2014. This

literature review provides the basis for defining and defining criteria for selecting green suppliers. Most empirical research on green supplier selection focuses on electronics (42%) and the automotive industry (19%).

Therefore, for rigorous research in other industries, professional consultants are required to determine the appropriate standards. Unfortunately, the agricultural and food industries are ignored in the researcher's vision with regard to the high environmental impact on agriculture and the food industry. More attention should be paid in this area.

Green Innovation Effect on Environmental Performance and Competitive Advantage: Environmental Performance

Green innovation means any form of innovation activity that greatly improves or targets the protection of the environment. Green invention includes new processes which are related to production, the implementation of new ways of management and business, and new products and services can prevent the environmental pollution and negative impacts of the resources which are related to our society. The global market of products and services according to the environment is growing. OECD studies estimate that goods and services provided by the Green industry in the European Union alone represents about 2.2% of the EU's GDP. Clearly, green-invention represents the opportunities to establish Europe's leading role to overcome the world challenges which was related to the sustainability and creates opportunities of business which makes the Europe's economy more strong and competitive in the future”.

Green invention is also called invention of environment or environmental invention in the literature, define as the "new or modified processes, technologies, systems and products and products to avoid or reduce environmental damage." It can be further divided into green product invention and green invention process. Green product invention creates advance or new products to minimize the impact of the environmental; green invention process also creates advance or modern production tools as well as ways and procedures to reduce the environmental burden. As compare to the other invention, green invention creates important external impacts because it can lead the world to safe from air pollution, smoke of factories and wastage of water with chemicals.

Most important issue in the green invention is the connection between the inventor and the performance. Researcher has divided the performance of green invention into two factors: financial performance and environmental performance. A positive relationship was identified b/w green invention and environmental performance but the relationship between green innovation and economic performance is not critical. Some literature supports the hypothesis that green innovation has a positive impact on financial performance, while others do not. It looks that the green invention can produce better environment performance and that innovators have to pay extra care to how innovation revenue can be properly applied. Thus Further study of the relationship b/w invention of the green &the benefits of invention will help.

Competitive Advantage

Companies can save money by creating green processes. Pollution usually occurs as a result of waste of resources, incomplete use of materials, or energy loss. Reassessing a company's production processes and innovations can improve resource efficiency and greatly reduce costs. For example, 3M saved \$ 1 billion in pollution prevention cases in 2005. The previous case could be seen in the Belgian manufacturer, which uses an environmentally friendly

manufacturing system to reduce waste. Reduced pollution, on the other hand, reduces the cost of liability, avoiding litigation, potential fines and application costs. In addition to reducing production costs and avoiding the cost of responsibility, green process innovation can be a source of benefits for differentiation and allow companies to increase market share and profits. Some study shows the green artists entice many downstream customers. For example, some companies like Wal-Mart, IBM, Body shop, forever estimate the performance of the environment when makes the firm decision.

Green invention can attract many customers. With the use of green innovators firms will increase market share. Taking the example of wastewater limitation, pollution-intensive industries including mining have been discovered online in China since 2006. Install real-time monitoring equipment in the sewer outlet. If pollutants in evacuated water exceed the base, the concentrate company will be punished or excessively terminated. Mining companies should install sewage treatment equipment. The investment in this equipment is quite high, but coal mining companies can avoid potential losses. In addition to pollution control at the end of pipes, former creators use recycling technology in their operations. This recirculation technology can reduce water consumption and waste water discharge (Ahmad & Karadas, 2021).

Conceptual Model

In review of this several study; the following are the very important. a review of the link between green purchases & the company's performance concluded that the costs of green purchases & sold products are increasing the net profit margin of the parties. See at performance of green supply chain is indicators for industries of the electronics, we concluded that the measurement is part of the overall system and we concluded that financial & green supply chain management & also performance of the functional measurements part of the overall system and that is a positive relationship b/w in financial & operating effect of GSCM. Particular factors are analyzed in the GSCM, which is a methodology for environmental law, foreign shareholders in the company, financial performance & management performance. Good environmental has a good effect on the overall act of the company but its impact on performance, productivity, resources, competitive advantage, and also including performance of market & resources and non-physical assets, is not significant. Conding et al., (2012). We presented a model which was based on the green innovation and initiative in automotive industries.

This innovation in the process and products are the basic elements of the green innovation, and these factors of the green initiative are represented in the incoming operations, integrated technology, logistics management, customers and suppliers. To find connections between greens innovative performs and the SCM, Seman et al., (2012a) conclude green innovation can be creating in the green supply chain management potential in a business. The embraced elements which are includes in the key processes of invention and management, product invention is the components of green invention, as well as working with clients, environmental and internal management, is the modules of SCM. Yang et al., (2013).

Conducting a study on a transport company of the Taiwanese container to study the connection between green performance, competitiveness, external and internal behavior. Modeling the structural equation used for economic technology and economic development, 2016, 22(1): 293–308 299 this study. This result showing that external and internal activities has

the positive impact on green performance, due to which positive impact can be take place on the competitive advantage of the company. Green marketing, green policy, and green shipping practices was analyzed in the internal measures. In addition, green practices for external, these measures included: green cooperation & cooperation with supply chain partners. Low pollution rates and lowest cost have been shown to increase productivity, increase profits and improve service quality.

The effectiveness and strength of research methods have increased the use of structural equation modeling in modeling various elements. For example, structural equations were used to investigate the effect of official measures (legal & normative, and competitive), inside measures (green design, green home environment management), and Externals measure (customer works, return to shareholders against investment, greens purchase). I used modelling Green Supply Chain Management (Environment, Operations and Economics). Established measures shows the result stimulates of inside and outside measures. According to the study of green metrics shows that not directly related to performance of economic, but the other side improvements in company performance can be tracked. Little research has been done on countries in green supply chain management. Inconsistencies and unspecified relationships between factors related to green innovation, achievement & competitive advantage can be defensible by the wide-ranging study that the author aims to this study. The following sections provide the important ideas and assumptions for the studies. Based on reviews of theoretic and experimental works, Chiou et al. (2011), the research model is characterized by small changes to fit the research gap and industry context. Research hypotheses model are presents in the Figure 2. Which main questions are sent by the researchers, which are following propositions are offered.

Proposition 1 Green innovation has important relationships with suppliers.

Proposition 2 Green suppliers are linked to the environmental performance of the organization.

Proposition 3 Green suppliers are closely related to the enterprise's competitive advantage.

Proposition 4 Green innovation is closely related to the environmental performance of the organization

Proposition 5 Green innovation is closely related to the enterprise's competitive advantage.

Proposition 6 There is an important relationship between the enterprise's environmental performance and its competitive advantage.

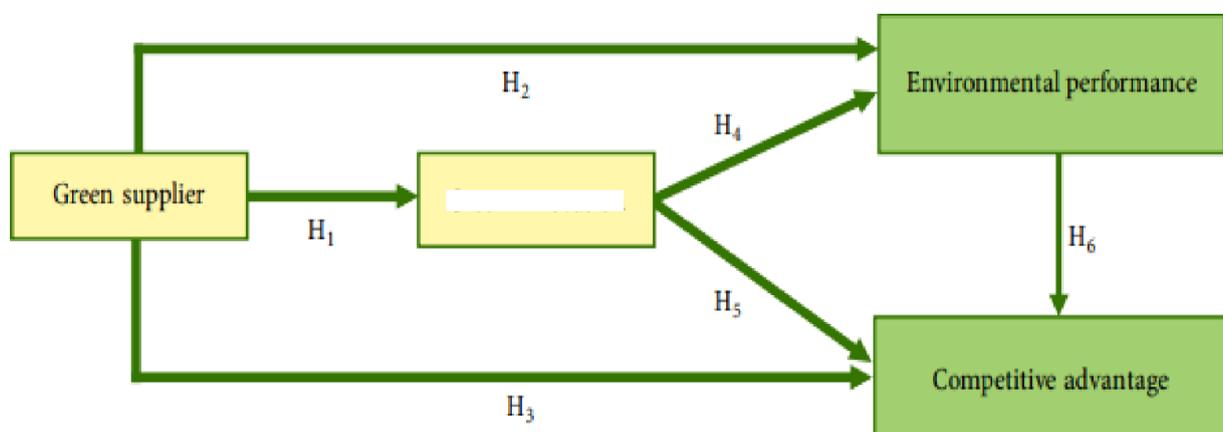


Fig. 2. Deployed conceptual model (adapted from Chiou et. at., 2011)

Implication

Green Supply Chain Practices Implementation on M/s Mian Brothers Precast (Pvt.) Ltd M/s Mian Brothers Precast (Pvt) Ltd. is a business entity, which casts cemented electricity poles for wapda by using cement and crushed stone. It took contracts often from govt. The types of contracts are mostly tender based. The main purchases are according to division i.e. LECSO, FECSO, MEPCO, GEPCO etc. According to Environment Act, during pre-casting activities of cemented electricity poles, there is 0 discharge or omission of any affluent, waste, air pollution or noise in contradiction with Environmental Quality Standards where applicable under the Punjab Environmental Protection Act 2012 (hereinafter the Act.) all precautions have ever been taken to ensure sanctity of environment and protect human life. After conducting interview from hire authority of the firm the result shows that these four Practices of green supply Chain Management are implements in firm.

Green Supplier

According to higher authorities we bought such products or materials that haven't any bad impact on environment. The main products are cement, PC wire and stone crush. This can be done only due to the good relation between company and suppliers.

Source of Green Material

Company bought the material according to the proper strategy and planning for the purpose of its reusability or recycling. The lists of materials are HD pipes, Bitumen, Nut and bolts, sand and wood.

Marketing of Green

The poles haven't any bad impact on environment and don't require any large marketing for the business. However, any steps related to marketing are very environment friendly and consider as a green marketing.

Warehousing and Green Distribution

After manufacturing the poles these are used to place on such place where sunlight can reach them easily so the life of poles and their bounding become stronger and this process is pure natural and eco-friendly. The process of distribution is design in such a way that receiver can receive it without any waste of cost and safely reach its final destination.

Green Manufacturing

During pre-casting activities of cemented electricity poles, there is 0 discharge or omission of any affluent, waste, air pollution or noise in contradiction with Environmental Quality Standards where applicable under the Punjab Environmental Protection.

Implementation of Conceptual model at M/s Mian Brothers Ltd.

Company purchase the quality material which means the material which have very low or equal to non-impact on environment. The major materials that company needs are PC wire which made up of good quality material and according to the rules of Punjab Environmental Protection. If company use the low quality wire and cement which may cause the reduction of cost but have bad impact on environment due to which company can't claim the green innovation which have directly impact on environmental performance and competitive advantage. Competitive advantage means the quality of product not just by the cost of poles. So Green suppliers have directly impact on all others business related process. So the relation

between green suppliers, green innovation is closely related to the competitive advantages and environmental performance. At the result of this we just conclude that all the three factors just have directly impact on competitive advantages.

Conclusion & Recommendation

The purpose of supply chain management is to deliver goods and services to the customer within time and customer satisfaction. With the growth of supply chain management, the one and foremost important factor we should consider is that how much it effects the environment. So, the concept green supply chain management grows and shows its importance in this field. Many Countries focuses on the issues of environment as well as there is the trend between many countries and large organizations for the search of sustainability. The rising popularity of issues is clearly verified by the effort of researchers in this area. A number of studies give a talk on these issues.

The top priority of green supply chain management practices is to reduce the negative impact on environment and achieve the maximum benefits of competitive advantage with the help of recycling of raw & waste materials and all components parts that industries do waste most of the time. All the practices of green supply chain management are implemented on pole creation process. With the help of our study we conclude that few of these practices are already implemented in company. Those firms who follows the practice of green supply chain management are having direct relation between cost saving and efficiency as compare to their previous working processes. In every field and manufacturing cycle green supply chain prove itself a well desired and most beneficial technique. That's why most of the companies are following the practice of GSCM. It also plays a significant role in the factor of competitive. GSCM fulfills and enhance the other factors as well i.e. consumer relation, demand of management style etc. According to difference surveys it is concluded that GSCM is most effective way of manufacturing who take care of environmental changes and also helps in business strategies. It shows the positive relationship of all practices among green provider/suppliers, green invention, performance of environment and competitive advantage. Now a day, Firms realize that the importance of GSCM due to it plays an important role in every field of industry. It helps in supplying good, manufacturing goods and in competitive strategies. Green supply chain practices are being implemented in few companies and only just to fulfill the rules and regulation of their environmental laws not because to achieve all benefits of green supply chain management.

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